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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,020	06/12/2001	John Border	PD-990184A	5838

7590 09/02/2004

HUGHES ELECTRONICS CORPORATION
Bldg. 001, M/S A109
P.O. Box 956
El Segundo, CA 90245-0956

EXAMINER

PATEL, HARESH N

ART UNIT PAPER NUMBER

2154

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/879,020

Applicant(s)

BORDER ET AL.

Examiner

Haresh Patel

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-42 is/are rejected.
7) ☒ Claim(s) 1,5,8,9,24,28,31 and 32 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 12 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-42 are presented for examination.

Priority

2. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-42 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3, 5-29, dated 6/30/2004, of copending Application No. 09/662072. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of independent claims 1, 24 are similar to claim 3 of the copending Application No. 09/662072. The limitations "a spoofing element, which spoofs some of the multiple connections of the first type based on their associated applications, network apparatus connected to other network entities via a first type of connection and other network entities via a second type of connection, and establishing multiple

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connections of a first type associated with different applications” is equivalent to the use of “a network apparatus having a proxy to facilitate communication with other network entities by performing a performance enhancing function, the proxy communicating with the other network entities via a first type of connection and a second type of connection, wherein the proxy establishes multiple connections of the first type associated with different applications”. The limitations of dependent claims 2-23, 25-42, are similar to claims 5-29 of the copending Application No. 09/662072.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 1 and 24 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8, dated 7/29/2004, of copending Application No. 09/664165. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of independent claims 1, 24 are similar to claim 8 of the copending Application No. 09/664165. The limitations “a spoofing element, which spoofs some of the multiple connections of the first type based on their associated applications, network apparatus connected to other network entities via a first type of connection and other network entities via a second type of connection, and establishing multiple connections of a first type associated with different applications” is equivalent to the use of “an apparatus having a spoofing unit that decides to perform transport level spoofing using the Transmission Control Protocol (TCP) and the User Datagram Protocol (UDP) with a determination that the transport level connection is for use in sending FTP data and the selective

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spoofing unit deciding not to perform transport level spoofing with a determination that the transport level connection is for use in sending FTP control messages”.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Specification

5. The disclosure is objected. Some of the informalities are:

- i. Unless the invention is created from scratch, applicant needs to provide all the prior arts that have led to the invention, including the information described in the “Description of the related art” section, i.e., existing patents and publications related to the claimed subject matter. In response, applicant is requested to provide the title, citation and copy of each publication related to the claimed subject matter. For each publication, please provide a concise explanation of that publication’s contribution to the description of the prior art.

Appropriate correction is required.

6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The present title is not sufficient for proper classification of the claimed subject matter.

7. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be

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directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract of the disclosure is objected to because it does not contain key components of the invention and is not properly understood. It is not apparent, what selective spoofing is and what selective spoofing is providing, what are the TCP spoofing resources, what selective spoofing functions are. The terms "may be", "such as" are not allowed. Also the abstract does not clearly state the goal of the invention. Correction is required. See MPEP § 608.01(b).

Drawings

8. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

9. Claims 1, 5, 8, 9, 24, 28, 31 and 32 are objected to because of the following informalities:

Claim 1 mentions "other network entities". It is not apparent whether other network entities are the same entities or other, i.e., different entities. Considering the usage of the term, "other", examiner considers, that the first "other network entities" are not the same as the second "other network entities" for examination purpose.

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Claims 5, 8, 9, 24, 28, 31 and 32, mention, "the at least one spoofing". It is suppose to be "the spoofing", in order to refer to the previous usage of "at least one spoofing".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Claim 1 recites the limitation "spoofs some of the multiple connections of the first type".

There is insufficient antecedent basis for this limitation in the claim.

12. Claim 6 recites the limitation "the spoofed connections based on the type of application".

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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14. Claims 1-19, 24-38 are rejected under 35 U.S.C. 102(a) as being anticipated by applicant's admitted prior art (AAPA, pages 2-7).

15. As per claims 1 and 24, AAPA teaches a network apparatus connected to other network entities (e.g., paragraph 12, pages 5 and 6) via a first type of connection (e.g., TCP and/or UDP data and/or control connection, paragraph 14, pages 6 and 7), and other network entities via a second type of connection (e.g., TCP and/or UDP data and/or control connection, paragraph 14, pages 6 and 7), and a method comprising:

establishing multiple connections of a first type (e.g., paragraph 13, page 6) associated with different applications (e.g., Telnet application, FTP application, paragraph 14, pages 6 and 7);

a spoofing element (e.g., paragraph 12, pages 5 and 6), which spoofs some of the multiple connections of the first type based on their associated applications (e.g., Telnet application, FTP application, paragraph 14, pages 6 and 7, paragraph 6, page 3).

16. As per claims 2 and 25, AAPA teaches the following:

spoofing element only spoofs connections of the first type associated with high throughput applications (e.g., paragraph 14, pages 6).

17. As per claims 3 and 26, AAPA teaches the following:

spoofing element assigns spoofing resources, including buffer space and control blocks, to the spoofed connections (e.g., paragraph 15 page 7).

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18. As per claims 4 and 27, AAPA teaches the following:

spoofing element spoofs connections using at least one spoofing rule based on destination address, source address, destination port number, source port number, options, a differentiated services (DS) field or combinations thereof (e.g., paragraph 12, pages 5 and 6).

19. As per claims 5 and 28, AAPA teaches the following:

spoofing element defines the at least one spoofing rule in a selective spoofing profile (e.g., paragraph 12, pages 5 and 6).

20. As per claims 6 and 29, AAPA teaches the following:

spoofing element assigns at least one spoofing parameter set, including at least one of maximum transmission unit (MTU), maximum segment size (MSS), three- way handshake spoofing, connection priority, maximum advertised window size, response (or retransmission) timeout, number of retransmissions, fast retransmission threshold, keep alive timeout, retry counts, retransmission timeouts, and initial window sizes, or combinations thereof to the spoofed connections based on the type of application (e.g., paragraph 7, page 3, paragraph 15, page 7).

21. As per claims 7 and 30, AAPA teaches the following:

spoofing element selects parameters for a spoofed connection using at least one spoofing rule based on destination address, source address, destination port number, source port number, options, a differentiated services (DS) field or combinations thereof (e.g., paragraph 12, pages 5 and 6).

22. As per claims 7 and 30, AAPA teaches the following:

spoofing element selects parameters for a spoofed connection using at least one spoofing rule based on destination address, source address, destination port number, source port number, options, a differentiated services (DS) field or combinations thereof (e.g., paragraph 12, pages 5 and 6).

23. As per claims 8 and 31, AAPA teaches the following:

spoofing element defines the at least one spoofing rule in a selective spoofing profile As per claims 7 and 30, AAPA teaches the following:

24. As per claims 9 and 32, AAPA teaches the following:

spoofing element defines the at least one spoofing parameter set in a spoofing parameter profile (e.g., paragraph 7, page 3, paragraph 15, page 7).

25. As per claims 10 and 33, AAPA teaches the following:

spoofing element spoofs some of the multiple connections of the first type based on at least one operator selectable criterion (e.g., paragraph 14, pages 6 and 7).

26. As per claims 11 and 34, AAPA teaches the following:

spoofing element selects parameters for spoofing some of the multiple connections of the first type based on at least one operator selectable criterion (e.g., paragraph 14, pages 6 and 7).

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27. As per claims 12 and 35, AAPA teaches the following:
the first connection uses a high layer protocol (e.g., paragraph 6, page 3).
28. As per claims 14-17, AAPA teaches the following:
the second connection is a backbone connection / a wireless link / satellite link with high latency and high error rate (e.g., paragraph 12, pages 5 and 6, paragraph 8, page 4).
29. As per claims 18, 37, AAPA teaches the following:
network apparatus is a component of a network gateway (e.g., paragraph 12, pages 5 and 6) / a host (e.g., paragraph 4, page 2).

Claim Rejections - 35 USC § 103

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

31. Claims 20-23, 39-42, are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of "Official Notice".
32. As per claims 20-23, 39-42, AAPA discloses the claimed limitations as rejected under claims 1 and 24. However, AAPA do not specifically mention about network apparatus is a component of a hub / a switch / a VSAT / a router.

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“Official Notice” is taken that both the concept and advantages of providing a hub / a switch / a VSAT / a router as a component of the network apparatus is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a hub / a switch / a VSAT / a router as a component of the network apparatus with the teachings of AAPA in order to facilitate connection to other network entities via a first type of connection and other network entities via a second type of connection. The well-known use of network devices, i.e., a hub / a switch / a VSAT / a router, would provide different types of connections between the network entities over the network.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is 703-605-5234. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 703-305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Haresh Patel

August 26, 2004



JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100